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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,381	07/01/2005	Akitoshi Yamada	00862.023429	6303

5514 7590 04/19/2007
FITZPATRICK CELLA HARPER & SCINTO
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EXAMINER

HENN, TIMOTHY J

ART UNIT	PAPER NUMBER
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2622

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/541,381	YAMADA ET AL.	
	Examiner	Art Unit	
	Timothy J. Henn	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-21 and 31-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-21 and 31-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5 April 2007 has been entered.

Response to Arguments

2. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 14-17 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (US 2001/0048534) in view of Photographic and Imaging Manufactures Association, Inc. PIMA 15740:2000 (hereinafter referred to as PTP) in view of Kare et al. (US 5,541,656).

[claim 14]

Regarding claim 14, Tanaka discloses an image supply device used in a recording system in which the image supply device and a recording apparatus communicate with each other via a communication interface (Figure 1) and image data is transmitted from the image supply device to the recording apparatus and recorded (Figure 8), comprising: transmission and reception means for transmitting and receiving between the image supply device and recording apparatus (Figure 5, Item 136). However, Tanaka discloses a system in which the recording apparatus sends commands to the image supply apparatus instead of the image supply apparatus sending commands to the recording apparatus as claimed.

PTP discloses that image transfer between an image supply device and recording apparatus can operate in either a pull or push model (pages 5, 37 and 42-45). In a push model, the image supply device sends commands and pictures to the recording apparatus and receives responses to the commands from the recording apparatus instead of the recording apparatus requesting the pictures from the image supply device (page 45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to operate in a push model in which the image supply device of Tanaka sends commands to the recording apparatus instead of the other way around since the push model of sending images is an art recognized equivalent system for sending images. However, Tanaka in view of PTP does not disclose determining whether a received signal is a response to a send command and controlling the issuing timing of a next command when the determining means determines that the signal is not the response.

Kare discloses a similar system in which an image supply device communicates with a recording apparatus which further controls a flow control system in which the sender waits for a response from the receiver after sending a packet of data in which a proper response consists of ACK, NAK or CAN and discards any other character received (c. 11, l. 11 - c. 12, l. 60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the flow control system of Kare in the system of Tanaka in view of PTP to allow a sender (e.g. the image supply device when transferring image data to the recording apparatus) to ensure that data transferred has been properly received. The examiner notes that by waiting for a response of ACK, NAK or CAN before proceeding, the timing of the next command is inherently controlled as claimed. The examiner notes that as broadly as claimed, the term "command" can be considered equivalent to transferring image data (e.g. "SendObject"; page 45 of PTP since the data results in a specific action being performed by the receiver, e.g. writing the data and invalidating SendObjInfo).

[claim 15]

Regarding claim 15, Kare discloses delaying the issuing of a next command until ACK, NAK or CAN has been received (i.e. a predetermined time period defined as the period from the issuing of the command until the reception of ACK, NAK or CAN).

[claim 16]

Regarding claim 16, Kare discloses delaying the issuing of a next command until ACK, NAK or CAN has been received (i.e. a predetermined time period defined as the period from the issuing of the command until the reception of ACK, NAK or CAN). The

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examiner notes that since errors randomly occur in transmissions, the time period will be randomly changed (i.e. waiting until proper reception of ACK, NAK or CAN before issuing a next command).

[claim 17]

Regarding claim 17, Kare discloses updating the time period every time the reception means receives a response other than the ACK, NAK or CAN (i.e. discarding responses until ACK, NAK or CAN).

[claims 31-34]

Claims 31-34 are method claims corresponding to apparatus claims 14-17. Therefore, claims 31-34 are analyzed and rejected as previously discussed with respect to claims 14-17.

5. Claims 18-21 and 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (US 2001/0048534 A1) in view of Fujita et al. (US 6,055,361).

[claim 18]

Regarding claim 18, Tanaka discloses a recording apparatus used in a recording system in which an image supply device and a recording apparatus communicate with each other via a communication interface (Figure 1) and image data is transmitted from the image supply device to the recording apparatus and recorded (Figure 8), comprising: command issuing means for issuing a predetermined command to the image supply device (Figure 5, Item 136; Figure 8) and reception means for receiving a

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signal from the image supply device after the command issuing means issues the predetermined command (Figure 5, Item 136; Figure 8). However, Tanaka does not disclose a determination means or control means as claimed.

Fujita discloses a printer control system in which the printer receives signals and determines whether the signals correspond to an urgent executing command or status inquiry command. If it is determined that an urgent executing command or status inquiry command is received, the command is preferentially processed and a response is sent (c. 6, ll. 6-34). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include determination and control means as taught by Fujita for determining if an urgent executing command or status inquiry command is sent from the camera to allow the camera to halt or resume printing operations, command to clean the printer head or receive status updates from the printer.

[claim 19]

Regarding claim 19, Fujita discloses preferentially processing urgent or status commands. Therefore, the issue timing of a next command will necessarily be delayed by a predetermined time (i.e. the time necessary to process the urgent or status command) since the urgent or status command is preferentially processed before other operations are carried out (c. 6, ll. 6-34).

[claim 20]

Regarding claim 20, Fujita discloses controlling issuing timing of a next command based on whether a status or inquiry command is received. The examiner notes that

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since errors randomly occur in transmissions, the predetermined time will be updated at random depending on whether or not the signal from the image supply device is properly received or not.

[claim 21]

Regarding claim 21, Fujita discloses preferentially processing urgent or status commands. Therefore the time period would be "updated", i.e. changed to equal the processing time of the status or inquiry command, every time a urgent or status command is received.

[claims 35-38]

Claims 35-38 are method claims corresponding to apparatus claims 18-21. Therefore, claims 35-38 are analyzed and rejected as previously discussed with respect to claims 18-21.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Henn whose telephone number is (571) 272-7310. The examiner can normally be reached on M-F 11-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TJH
4/13/2007



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